

# Kansas Behavioral Health Risk Bulletin

## Kansas Department of Health and Environment



October 31, 1995

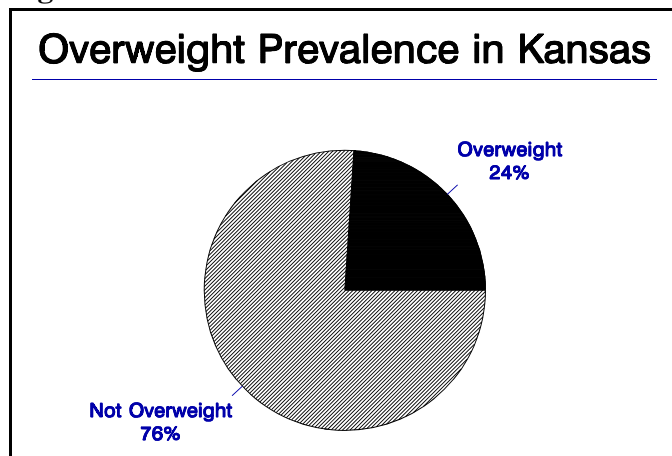
Bureau of Chronic Disease and Health Promotion

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## Overweight Prevalence in Kansas

Being overweight increases the risk of premature death and is one of the most prevalent health problems in Kansas, affecting nearly one out of every four Kansans (Fig. 1). A person who is overweight is 3 times more likely to have high blood pressure, and is 3 to 4 times more likely to have diabetes<sup>1</sup>. Being overweight is associated with increased risk of developing coronary heart disease (CHD), elevated blood cholesterol, and osteoarthritis of the knee<sup>2</sup>, possibly stroke<sup>3</sup> and female breast cancer<sup>4</sup>.

Figure 1



It has been demonstrated that the average person in the United States will gain approximately one pound of additional weight each year after the age of 25; resulting in 30 pounds of excess weight by age 55. However, this 30 pound weight gain represents a gain of 45 pounds of fat, since bone and muscle mass decrease by approximately 1/2 pound per year, after the age of 25, due to reduced physical activity; therefore, fat is actually increasing by 1.5 pounds per year<sup>5</sup>!

Many Kansans successfully lose weight using a variety of diet plans; however, dieting improperly can be harmful to a person's health. A person trying to lose weight should make *permanent* changes in his or her eating habits, otherwise the weight that is lost is likely to be regained within a short period of time<sup>5</sup>. Important changes that can be made to improve an individual's eating habits are 1) to cut down on the amount of fat that is consumed, by limiting the percent of total calories from fat to 30% or less, 2) reducing simple sugar intake (e.g. desserts, regular soft drinks), 3) reducing alcohol consumption, and 4) including more fruits, grains, and vegetables in the diet.

Physical activity is a substantial factor in maintaining body weight or losing weight. Exercise burns calories to help create the caloric deficit needed to lose or maintain weight. By exercising to lose weight, with or without dieting, a person will lose a higher percentage of body fat than by dieting alone<sup>5</sup> (and will also result in less loss of muscle and bone mass).

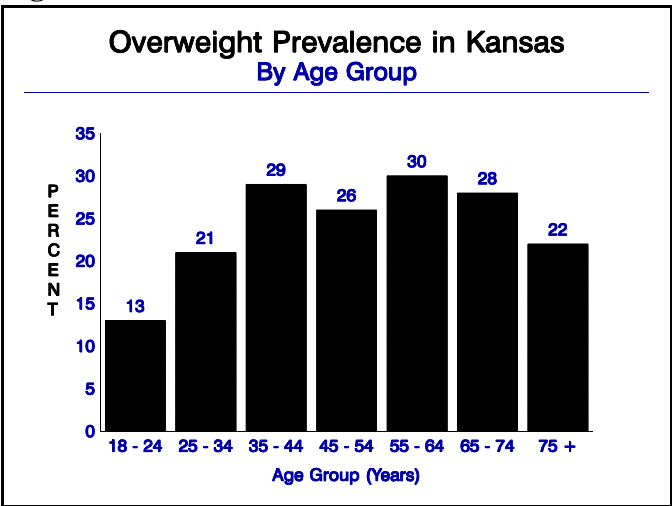
In 1993, the Kansas Department of Health and Environment, Bureau of Chronic Disease and Health Promotion, conducted the Behavioral Risk Factor Surveillance System (BRFSS) survey to assess the prevalence of health behaviors among adult Kansans (aged 18 and older) through a random digit-dialed telephone interview. Respondents were asked "How tall are you without shoes?," and "How much do you weigh without shoes?" To determine the percentage of persons who are overweight, the Body Mass Index [BMI = weight in kilograms, divided by the square of the height in meters (kg/m<sup>2</sup>)] based upon the respondents self-reported height and weight, was

used. According to the definition used by the BRFSS, males with a BMI  $\geq 27.8$  and females with a BMI  $\geq 27.3$  are considered to be overweight\*.

This bulletin will examine overweight prevalence in Kansas, interventions which may help reduce the proportion of Kansans who are overweight, and the Healthy Kansans 2000 objectives relating to overweight prevalence.

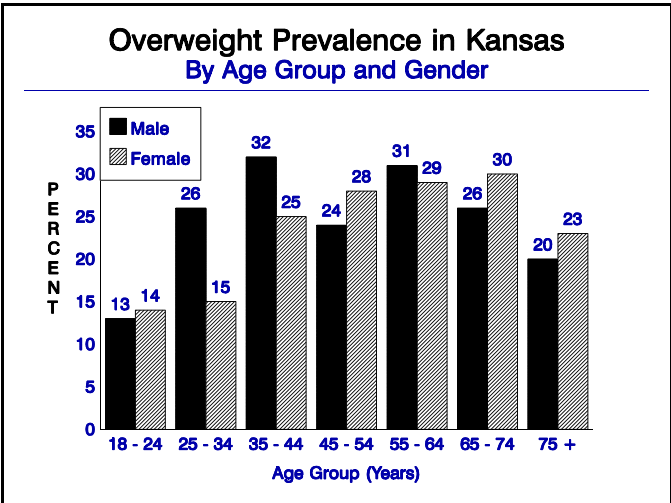
**Race:** According to the 1993 BRFSS survey, 24% of Kansans are overweight based on BMI. White Kansans are less likely to be overweight (23%) than Hispanic (37%) or African-American Kansans (33%).

Figure 2



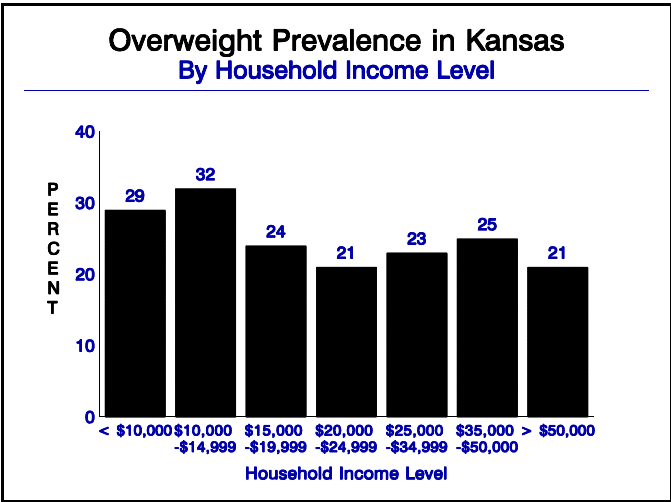
**Age Group and Gender (Fig. 2, 3):** Generally, the proportion of Kansans who are overweight increases with advancing age until age 65 at which point it begins to decrease. Kansans aged 18 to 24 have the lowest prevalence of being overweight (13%), with overweight prevalence increasing to a high of 30% among Kansans aged 55 to 64 (Fig. 2). Men and women report similar overweight prevalences (25% vs. 23%). However, men are more likely than women to be overweight before age 45, while women aged 45 and older have a higher prevalence of being overweight than men (Fig. 3).

Figure 3



**Income (Fig. 4):** The highest proportion of Kansans who are overweight occurs among Kansans with household incomes of less than \$15,000 (31%). Among Kansans with household incomes of \$15,000 or greater, overweight prevalence ranges from 21% to 25%.

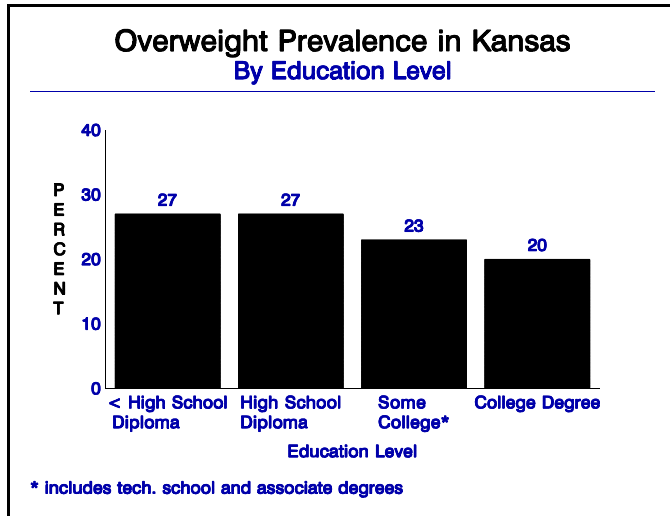
Figure 4



**Education (Fig. 5):** The prevalence of being overweight among Kansans decreases with higher levels of educational attainment. Kansans with a high school diploma or less have a greater prevalence of being overweight (27%) than Kansans with some college (23%) or college degrees (20%).

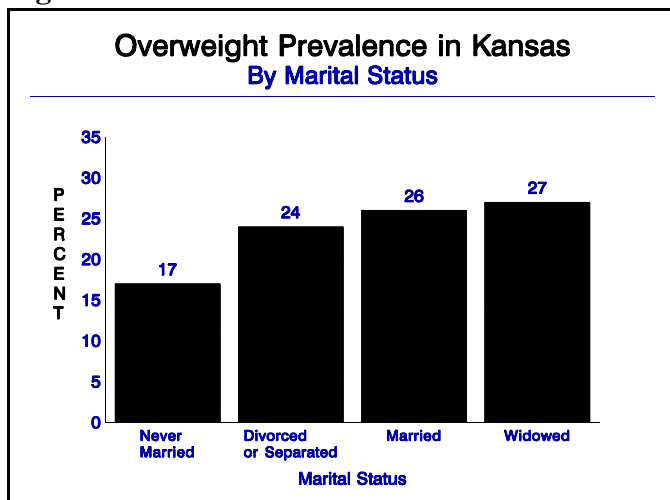
\* 1 kilogram (kg) = 2.205 pounds; 1 inch = 0.0254 meters (m)

Figure 5



**Marital Status (Fig. 6):** Kansans who have never married are less likely to be overweight (17%) than Kansans who are married (26%), divorced or separated (24%), or widowed (27%).

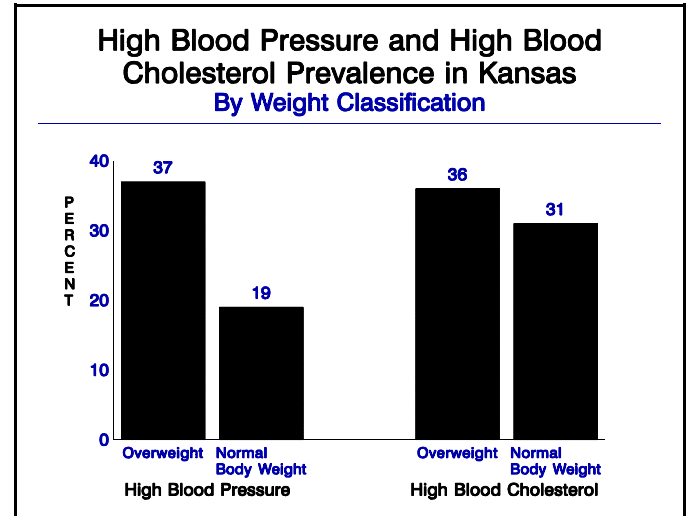
Figure 6



**Diabetes:** Kansans who are overweight have a higher prevalence of diabetes (8%) than Kansans who have a normal body weight (3%).

**Blood Cholesterol (Fig. 7):** Among Kansans who have ever had their blood cholesterol checked, the proportion of persons with high blood cholesterol is greater among overweight Kansans (36%) than among Kansans with normal body weight (31%).

Figure 7



**Blood Pressure (Fig. 7):** Kansans who are overweight are much more likely to have high blood pressure (37%) than Kansans with normal body weights (19%).

**Conclusions:** Using the information provided by the 1993 BRFSS survey, the following conclusions can be made regarding which groups are at greatest risk for being overweight:

- \* African-American and Hispanic Kansans
- \* Kansans aged 35 to 74
- \* Kansans with a high school diploma or less
- \* Kansans with household incomes below \$15,000
- \* Kansans who are or have been married
- \* Kansans with diabetes
- \* Kansans with high blood pressure
- \* Kansans with high blood cholesterol

**Recommendations:** The following recommendations are made to try to reduce the proportion of Kansans who are overweight:

1. Engage in regular physical activity at least 3 times a week for a minimum of 20 minutes.
2. Consume 30% or less of total calories from fat.
3. Reduce sugar and alcohol consumption.
4. Increase consumption of fruits, vegetables, and grain products.

**Healthy Kansans 2000 Objectives (Table 1):** The Healthy Kansans 2000 objectives relating to

overweight prevalence are:

1. Decrease to 20% the proportion of Kansans who are overweight.
2. Decrease to 30% the proportion of African-American women in Kansas who are overweight<sup>A</sup>.
3. Increase to 40% the proportion of Kansans whose dietary fat intake is less than 30% of their caloric intake.
4. Increase to 40% the proportion of Kansans aged 18 and older who regularly engage in light to heavy physical activity.
5. Decrease to 15% the proportion of persons aged 18 and older who engage in no leisure time physical activity.

#### References:

- 1 Pratt M, Smith CA. Cardiovascular Disease. IN: Brownson RC, Remington PL, Davis JR, eds. *Chronic Disease Epidemiology and Control*. APHA, Baltimore, MD: Port City Press, 1993: pp 83-107.
- 2 Scott JC, Hochberg MC. Arthritis and Other Musculoskeletal Diseases. IN: Brownson RC, Remington PL, Davis JR, eds. *Chronic Disease Epidemiology and Control*. APHA, Baltimore, MD: Port City Press, 1993: pp 285-305.
- 3 American Heart Association. *1992 Heart and Stroke Facts*. Dallas, TX: AHA. 1991.

**Table 1: Overweight Prevalence Related Objectives**

	Kansas Baseline	Healthy Kansans 2000 Objectives
Proportion of Kansans Who Are Overweight	26% (1992)	20%
Proportion of African-American Women Who Are Overweight	42.8% (1990, 1991, 1992 combined data)	30%
% of Kansans Eating < 30% of Calories as Fat	30% (1993)	40%
% of Kansans Exercising Regularly	22% (1992)	40%
% of Kansans Who Engage in No Physical Activity	29% (1992)	15%

- 4 Brownson RC, Reif JS, Alavanja MC, Bal DG. Cancer. IN: Brownson RC, Remington PL, Davis JR, eds. *Chronic Disease Epidemiology and Control*. APHA, Baltimore, MD: Port City Press, 1993: pp 137-167.
- 5 Wilmore JH. Exercise, Obesity, and Weight Control. Corbin C, Pangrazi B, eds. *Physical Activity and Fitness Research Digest*. President's Council on Physical Fitness and Sports, Washington, D.C.: Series 1, No. 6. May 1994.

For additional information contact the BRFS Coordinator at the address below or call (913) 296-1207.

A African American women are of special concern due to their higher risk of being overweight compared to other Kansas women (42.8% vs. 22%).



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